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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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TYCO ELECTRONICS CORPORATION 4550 NEW LINDEN HILL ROAD, SUITE 450 WILMINGTON, DE 19808			EXAMINER FAULK, DEVONA E	
			ART UNIT	PAPER NUMBER
			2644	
DATE MAILED: 04/25/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/636,158

Applicant(s)

MACRAE, RODERICK

Examiner

Devona E. Faulk

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2644

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: In Figure 1(b) the opening or inlet is referenced as 108. The specification has it referenced as 1118 in paragraphs 0015-0017. . Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 2644

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, and 5-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akino (U.S. Patent 6,148,089) in view of the applicant's admitted prior art Figure 1(a) and 1(b), paragraph 0015.

Regarding claim 1, Akino discloses a microphone enclosure comprising a casing (F; Figure 2B; column 4, lines 14-25) for containing a microphone (2, Figure 2B; column 4, lines 14-25) for receiving sound and converting said sound into at least one electrical signal (Figure 2B); and at least one inlet for allowing sound to reach said microphone; said at least one inlet having a plurality of openings (4, acoustic terminals, Figure 2B; column 4, lines 13,49-51) forming at least one tortuous path therein (Figure 2B). Akino teaches that the microphone unit can be used in a mobile system personal computer. Akino fails to disclose wherein said microphone is disposed between said at least one inlet and a wall of the casing as claimed. However this concept was well known in the art at the time of filing as taught by the applicant. The applicant's admitted prior art of Figure 1(b) discloses a microphone 112 between an opening or inlet

Art Unit: 2644

(108) and a casing (Figure 1). Even though a back of the phone is not reference, the phone obviously has a back casing of some sort. It would have been obvious to one of ordinary skill in the art to have the microphone disposed as taught by the applicant's admitted prior art in order to prevent the object from entering the hole far enough to pierce the microphone.

All elements of claim 2 are comprehended by claim 1 (4, acoustic terminals; Figure 2B).

All elements of claim 3 are comprehended by claim 2 (Figure 2B).

All elements of claim 5 are comprehended by claim 1 (5, waterproof film; Figures 11A and 11B).

Regarding claim 6, Akino discloses a microphone enclosure comprising a casing (F, Figure 2B) for containing a microphone (2; Figure 2B; column 4, lines 14-25) for receiving sound and converting said sound into at least one electrical signal (, Figure 1); an first opening proximate said microphone (4, acoustic terminals; Figure 2B; column 4, lines 13, 49-51); a second opening proximate said microphone (4, Figure 2B); and at least one inlet formed by a convergence of said first opening and said second opening (24; Figure 2B) for allowing sound to impinge upon said microphone. Akino teaches that the microphone unit can be used in a mobile system personal computer. Akino fails to disclose wherein said microphone is disposed between said at least one inlet and a wall of the casing as claimed. However this concept was well known in the art at the time of filing as taught by the applicant. The applicant's admitted prior art of Figures 1(a)

Art Unit: 2644

and 1(b) discloses a microphone 112 between an opening or inlet (108) and a casing (Figure 1). Even though a back of the phone is not reference, the phone obviously has a back casing of some sort. It would have been obvious to one of ordinary skill in the art to have the microphone disposed as taught by the applicant's admitted prior art in order to prevent the object from entering the hole far enough to pierce the microphone.

All elements of claim 7 are comprehended by the rejection of claim 6 (See Akino, Figure 1).

All elements of claim 9 are comprehended by the rejection of claim 6 (applicant's admitted prior art Figure 1(b) teaches of a gasket; paragraph 0016).

4. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akino (U.S. Patent 6,148,089) in view of the applicant's admitted prior art of Figure 1(a) and 1(b) paragraph 0015 and in further view of Hood et al. (U.S. Patent Application 2003/0072131).

Claim 4 claims the microphone enclosure of claim 1 and claim 8 claims the microphone enclosure of claim 6, wherein said microphone enclosure further contains a circuit board; integrated components on said circuit board for receiving signals from said microphone; and an antenna in communication with said integrated components for transmitting said electrical signal. Akino as modified by the applicant's admitted prior art meets all elements of claims 1 and 5. An integrated circuit board is inherently present but Akino fails to

Art Unit: 2644

disclose an antenna in communication with said integrated components for transmitting said electrical signal. Hood discloses a notebook computer with an antenna (164, 174; Figures 1 and 2; page 2, paragraph 0017, 0028) as claimed. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to use Hood's concept of an antenna to provide for wireless transmission.

3. Claim 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (U.S. Patent 6,525,854) in view of Akino (U.S. Patent 6,148,089) in further view of the applicant's admitted prior art Figures 1(a) and 1(b) paragraph 0015.

Regarding claim 10, Takahashi discloses a portable radio (Figures 1 and 4A) comprising a circuit board (Figure 1, obvious); integrated components on said circuit board for transmitting and receiving signals to and from said portable radio (Figure 2); an antenna (1; Figures 1 and 4A) in communication with said integrated components for transmitting and receiving said signals (Figure 1); a microphone (5) in communication with said integrated components on said circuit board for converting between sound and electrical signals; a casing for containing a microphone, said integrated components, and said circuit board (Figure 4A). Takahashi fails to disclose a first and second opening and at least one inlet as claimed. However, this concept was well known in the art at the time of filing as taught by Akino. Akino discloses a first opening (4, acoustic terminals; Figure 2B; column 4, lines 13, 49-51) in said casing proximate said microphone (2, Figures 2B); a second opening (4, acoustic terminals; Figure 2B) in said

Art Unit: 2644

casing proximate said microphone (2, Figure 2B), and at least one inlet formed by a convergence of said first opening and said second opening for allowing sound to impinge upon said microphone (Figure 2B). Akino teaches that the microphone unit can be used in a mobile system personal computer. Takahashi as modified by Akino fails to disclose wherein said microphone is disposed between said at least one inlet and a wall of the casing as claimed. However this concept was well known in the art at the time of filing as taught by the applicant. The applicant's admitted prior art of Figures 1(a) and 1(b) discloses a microphone 112 between an opening or inlet (108) and a casing (Figure 1). Even though a back of the phone is not reference, the phone obviously has a back casing of some sort. It would have been obvious to one of ordinary skill in the art to have the microphone disposed as taught by the applicant's admitted prior art in order to prevent the object from entering the hole far enough to pierce the microphone.

All elements of claim 11 are comprehended by the rejection of claim 10 (See Akino, Figure 1).

All elements of claim 12 are comprehended by the rejection of claim 6 (applicant's admitted prior art Figure 1(b) teaches of a gasket; paragraph 0016).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE

Art Unit: 2644

FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 571-272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7654. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2644

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DEF



SINH TRAN
SUPERVISORY PATENT EXAMINER